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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,944	08/09/2006	Dusan Miljkovic	100700.0025US1	2489

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EXAMINER	
MEHTA, HONG T	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/552,944	MILJKOVIC ET AL.	
	Examiner	Art Unit	
	HONG MEHTA	4152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *January 13, 2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to application 10/552944 filed on October 13, 2005. Claims 1-20 are pending. Claims 1, 10 and 18 are independent claims.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> **A person shall be entitled to a patent unless –**
>
> **(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.**

2. **Claims 1, 4-8, 10-11 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Boniello et al. (US 4,867,992 A) as evidenced by Fabian et al. (WO 9742831 A1) Duvick et al. (US 5,792,931 A) and Blanc et al. (J. Agric. Food Chem. 1998)**.

3. **Regarding claims 1 and 4-8**, Boniello et al. discloses a process to food product comprising part of or all of the all-coffee nutrient media include soluble solids from green extract (aqueous green coffee solids), ground green coffee beans, coffee by products (pulp, coffee husks and mucilage), as well as hydrolyzed spent grounds, roast and ground coffee (col. 2, lines 57-63) with water. Examiner notes the pulp, coffee husks and mucilage are part of coffee cherry fruit.

4. **Regarding claim 10,** Boniello discloses isolating nutrient (col. 2, lines 57-59) from coffee cherry (col. 2, line 61) and communicated coffee cherry (col. 2, lines 62-63) with at least one solvent to produce an extract (col. 2, lines 63-68; and col. 3, lines 1-6).

5. **Regarding claim 11,** Boniello discloses a process of freeze drying the extract (claim 31, col. 10, lines 11-15).

6. **Regarding claims 5 and 17,** Boniello et al. teaches the process of a composition that falls within the scope of claims 5 and 17, since the claimed end product may encompass a wide range of amount of mycotoxin, alfatoxin, fumonisins and ochratoxins including 0 ppb of the toxins.

7. Further, it is inherently known in the art of coffee processing emphasized by Fabian et al. those quantities of these micotoxins in the coffee are in actual fact extremely small in a few ppb – parts per billon (pg 1, lines 1-6). There are many different types of mycotoxins which are natural present of a preservative in coffee cherry including fumonisins as emphasized in Duvick et al. (paragraph 75) including fumonisins in coffee. It is further expected that the low range amount of the same in the product of Fabian would provide the some amount preservation effect. Furthermore, Blanc el al. discloses that ochratoxin A (OTA) is a nephrotoxic and nephrocarinogenic mycotoxin produced by several fungal species from the *Aspergillus* genus and by *Penicillium verrucosum*. Blanc et al. also discloses that natural occurrence of OTA in green coffee beans have been reports by several authors in concentrations ranging between 0.2 and 360 μg/kg or 0.2 and 360 ppb (Introduction).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. **Claims 9 and 12-14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Boniello et al. (US 4,867,992) further in views of Drunen et al. (US 6,572,915 B1).**

12. Boniello et al. teaches the claims 1 and 10 as discussed above.

13. Boniello fails to disclose stage of ripeness, quick-drying and chromatography extraction of coffee cherry. However, Drunen et al. discloses a process of combination of ground coffee and extract taken dried coffee cherry, e.g. pulp, hull, bean and mucilage, the by-products of coffee processing for beverage foodstuff by chromatography.

14. **Respects to claim 9**, Drunen et al. teaches a food product is beverage, juice (col. 2, lines 47-48) and carbonated drinks (col. 1, line 67).

15. **Respects to claims 12-14**, Drunen et al. teaches a chromatography with selective extraction for nutrients, caffeine, polyphenol and polysaccharides (col. 3, lines 40-56).

16. Boniello et al. and Drunen et al. are analogous art because they are the same field of endeavor of beverage foodstuff.

17. It would have been obvious to one of ordinary skill in the art to use combine teachings of Drunen et al. and Boniello et al. before him or her, to modify invention of coffee cherry extraction by chromatography of Drunen et al. to include in beverage foodstuff of Boniello et al.

18. The motivation for doing so would have been to remove the toxins from the extract for the purposes of administrating the selective extracts to a food, beverage or nutritional supplement by improving the quality and nutritional content of the foodstuffs for consumption ('915, col. 1, lines 41-46).

19. Therefore, it would have been obvious to combine Drunen et al. with Boniello et al. to obtain the invention as specified in the instant claims.

20. **Claims 2, 3, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boniello et al. (US 4,867,992) further in views Sivetz et al. (Coffee Technology 1979).**

21. Boniello et al. teaches the claims 1 and 10 as discussed above.

22. **With respects to claim 2, 3, 15 and 16**, Boniello et al. fail to disclose the cherry coffee ripeness by-product of the coffee production. However, Sivetz et al. discloses the ripe coffee fruit, losing chlorophyll, green to yellow to read as the coffee cherry fruit matures for coffee processing (pg. 74, paragraph 3) and is stripped in all stages of ripeness including "sub-ripe" coffee cherry (pg. 76, paragraph 2). Sivetz et al. discloses green coffee cherries to be dried either

mechanical drier for "quick drying" or on the sun-drying, or solar radiation in ambient air terrace for coffee processing (pg. 75).

23. Boniello et al. and Sivetz et al. are analogous art because they are the same field of endeavor of beverage foodstuff.

24. It would have been obvious to one of ordinary skill in the art to use combine teachings of Boniello et al. and Sivetz et al. before him or her, to modify invention of Sivetz et al. to all stages in ripeness and drying of coffee cherry in coffee processing to include in beverage foodstuff of Boniello et al.

25. The motivation for doing so would have been to remove the coffee cherries crop varying all stages of ripeness by strip-picked, after most of the coffee cherry fruits have matured, due to labor cost (pg. 75, lines 14-18). It is obvious that economics, specifically the supply, quality, and cost of labor in connection with the span of harvest are important in determining how coffee is to be harvested and dried (pg. 76, lines 16-18).

26. Therefore, it would have been obvious to combine Sivetz et al. and Boniello et al. to obtain the invention as specified in the instant claims.

27. **Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drunen et al. (US6,572,915 B1) further in view of The Free Dictionary by Farlex**.

28. Regarding claims 18-20, the teaching of Drunen et al. are set forth above. Drunen discloses a process for a food product or beverage with chromatography extraction of coffee cherry by-product of coffee processing with nutrient of polysaccharide, polyphenol and caffeine (col. 3, lines 40-56). Drunen et al. does not disclose a method of marketing the reference

composition *per se*. For instance, according to the The Free Dictionary by Farlex the concept of marketing a product generally entails the following aspects.

> "The activities of a company associated with buying and selling a product or service. It includes advertising, selling and delivering products to people. People who work in marketing department of the companies try to get the attention of the target audiences by using slogans, packaging design, celebrity endorsement and general media exposure. The four 'Ps' of marketing are product, place, price and promotion."

29. The teaching of Drunen et al. would have been obvious because the method of marketing a food product within the information about the ingredients is printed on at least the one of a container containing the formulation and a package containing the container would have been well within the purview of one ordinary skill in art at the time the invention was made.

Conclusion

30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fabian et al. (WO 9742831 A1) Duvick et al. (US 5,792,931 A), Blanc et al. (J. Agric. Food Chem. 1998) and Soucy (US 6,202,321 B1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HONG MEHTA whose telephone number is (571)270-7093. The examiner can normally be reached on Monday thru Thursday, from 7:30 am to 5:00 pm EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Joseph S. Del Sole/
Supervisory Patent Examiner, Art Unit 4152